

COOKIA

Journal of the Wellington Shell Club, New Zealand

VOLUME 28, NOVEMBER 2016



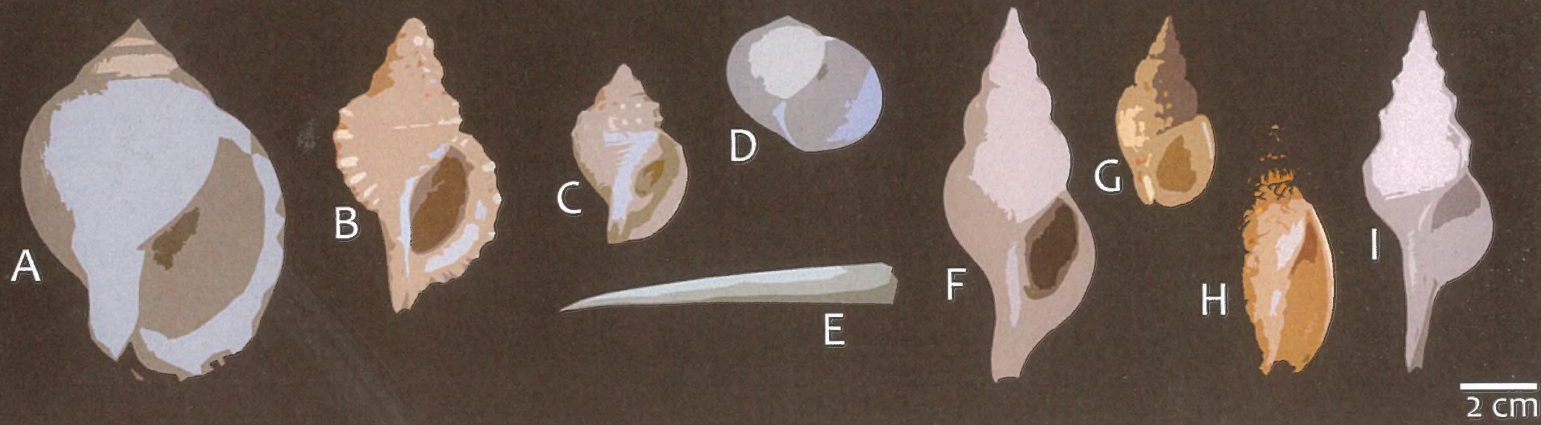
Collecting trip to
STEWART ISLAND

A night in
PAUATAHANUI

Shell collecting
& THE
LAW

*Ericusa
fulgetrum*

Identification challenge:



Solution inside rear cover

Contents

Cookia Volume 28, 2016

	PAGE
MORE NEW RECORDS FROM THE CHATHAM ISLANDS by Jenny Raven	2
STEWART ISLAND by various contributors	3-5
A NIGHT OUT by Mary Agnes Wotton	6
PAUATAHANUI INLET - FACTS & RECOLLECTIONS by various contributors	7-8
2016 AUSTRALIAN SHELL SHOW by Pat Lakeman	9
COLOUR VARIATION: <i>CELLANA RADIANS</i> (Gmelin, 1791) by Mary Agnes Wotton	10
FORTY YEARS ON by Pat Lakeman	11
NOTES ON NZ COLLECTED SPECIES by various contributors	12-16
<i>APLYSIA JULIANA</i> Quoy & Gaimard, 1832 by Bev Elliott	17-18
A WIDESPREAD EPITONIID: <i>CYCLOSCALA HYALINA</i> (G.B. Sowerby II, 1844) by Bert van Tiggele	18
NEW ZEALAND'S PROTECTED SNAILS & THE WILDLIFE ACT by Kerry Walton	19-20
MICROSPECIES FROM MAITAI BAY by Mary Agnes Wotton	21
A LITTLE LATIN IS A DANGEROUS THING by Jill Burnet	22-23
<i>ERICUSA FULGETRUM</i> (G.B. Sowerby I, 1825) by Peter Pienaar	24-25
A NOSTALGIC TRIP: WELLINGTON 5-16 JUNE 2016 by Eric Scott	26-27

Editorial

It will be interesting to see the future of shell shows in our part of the world.

Auckland Shell Club has no current plans to host a shell show in 2017. Between us, the Auckland and Wellington clubs have been organising biennial shows since the first 'national' show in 1995, but the resources to make them happen are increasingly scarce. And yet Australian shell clubs have announced this year that their national shows will in future be held every year. Local shows also endure across the ditch: while Keppel Bay Shell Club has been running annual shows for many decades, Cairns Shell Club has just successfully held its second annual (?) show.

Clubs have different recipes for their events and it is often easier to repeat a formula. But when resources are scarce, innovation can substitute. We should ask ourselves whether shell shows need competitive classes, judging, trophies and door charges.

For some of us, the allure of shell shows is the sight of all those amazing shells on display at the same time, and sharing that with others.

Let's hope we can continue to bring the shells and the people together.

More new records from the Chatham Islands

by Jenny Raven

I was always aware that a small stash of shell sand had been piling up in my basement waiting for a rainy day to sort; retirement last year provided this opportunity, but where to start? The 2015 issue of *Cookia* contained comment on additional new records from Chatham Island and this, along with John Marston's earlier lists in *Cookia* meant we had a listing of most Chatham finds. This would be a good place to start.

I found I had about 15 bags of Chatham shell sand that had been collected over five trips I had made to the island since 1994. Items smaller than 4 mm, requiring microscope examination, took the longest but after six months I have about 200 capsules of identified small shells and I am grateful to Bruce Marshall at

Museum of New Zealand Te Papa Tongarewa for assistance with this.

Most of the shells I found were already on the earlier lists and only *Cycloclamys pileolus* Dijkstra & Marshall, 2008 (from Taupeka Point), *Axymene aucklandicus* (E. A. Smith, 1902) and *Zemitrella choava* (Reeve, 1859) were new records of named species. The *Z. choava* has a lovely pattern and was not common in comparison with the more common *Zemitrella finlayi* Powell, 1933: it was found at Port Hutt, Okawa Point and Waitangi West. Of the unnamed species, some nice finds were a *Serrata* sp., three *Eatoniella* sp., a *Turbonilla* sp., a *Kellia* sp. (from Okawa), a *Borneola* sp. and an *Amphithalamus* sp. The *Serrata* sp. is a lovely little shell: it was found at

Kaingaroa and has the shape and pattern of *Serrata maoriana* (Powell, 1932) but at 4 mm is very much smaller. The smallest *Eatoniella* sp. is not at all like an *Eatoniella* shell; it has a circular shape with a wide umbilicus. The *Turbonilla* sp., found at Kaingaroa, is also a curious shape. Other items of note were an *Argalista fluctuata* (Hutton, 1883) with nice dark pink colouring and, although I found no *Micrelenchus tenebrosus* (A. Adams, 1853), a large *Micrelenchus huttonii* (E.A. Smith, 1876) measuring 13 mm was found in the shell sand from Taupeka Point.

References

Cookia Volumes 7/3, 8, 9 & 27. 1996, 1997, 1998 & 2015. Publications of the Wellington Shell Club.

A) *Turbonilla* sp. B) *Serrata* sp. C) *Zemitrella choava* D) *Zemitrella finlayi* E) *Amphithalamus* sp. F) *Cycloclamys pileolus*



Stewart Island

by various contributors

In February 2016, eleven members of the Wellington Shell Club made a trip to Stewart Island. There had been a lot of interest in going from various club members, and with eleven people we were able to book a whole lodge, with five bedrooms, three bathrooms and two kitchens. We all made our own way to Oban but eventually Kathy and Les Carson, Ann and Derrick Crosby, Leigh and Jim Crossland, Jenny Raven, Kris and Roger Woods, Graham Aamodt and Pat Lakeman all arrived at Rakiura Lodge on Sunday 7 February. We had eight full days ahead of us. We were a mixed crew in terms of previous experiences of Stewart Island: some were first time visitors, some had visited several times before, and Kris and Roger had had one previous visit when it had rained more or less every day.

Knowing Stewart Island well, Jenny knew what to expect in terms of topography and good shell collecting locations:

"Having made numerous trips to Stewart Island over the years I was more than pleasantly surprised how much I enjoyed this trip.

There are few roads on the island and on other trips I have usually walked everywhere. However the roads are steep and with a larger group we had no trouble gaining a consensus to hire a vehicle. I would recommend this as we could travel to places together and

it allowed some of us to fish or beach walk while others shelled or were dropped off along different parts of a beach.

This trip was the first time I had undertaken a night collect. A good headlamp and a level beach close to accommodation or transport is



recommended - in this case we chose the end of the main beach at Oban. The venture, at 10 pm, was fun and we did see shells, particularly live volutes.

Hiring a water-taxi is a must to get to out of the way spots. A taxi ride to Cow Island is still worth it for the lovely location, keyhole limpets (amongst other finds) and large paua. Hiring a water-taxi to Maori Beach is also recommended even if you walk back as we did. Optional extras like a fishing trip and visits to local collectors and plant and bird reserves are an added bonus. The accommodation booked by Pat catered well for us - it was an easy walk to the shops and nearest beaches.

The time of year, although in my experience not the best for wash-ups, was good for the fine weather and socializing with the group. I usually find something special for my shell collection: this time it was a large

Lunella smaragda (Gmelin, 1791) measuring 85 mm which was just sitting in the water at low tide, at the end of the beach at Oban."

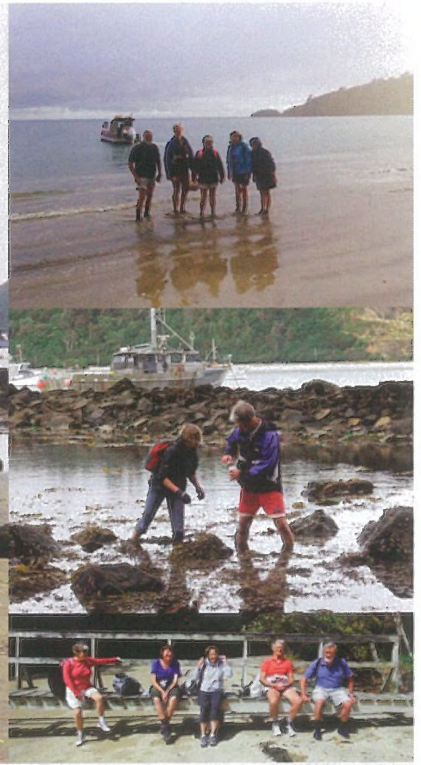
Some of Jenny's other good shell finds from this trip are featured in "Notes on NZ Collected Species" elsewhere in this issue. Different members on the trip had different interests, so sometimes Kathy was burrowing in the undergrowth hunting land snails while Pat took photographs of native ferns and Kris was looking up in the trees to spot native birds. Kris also focussed

her shell collecting on her favourite shell family:

"Having a particular interest in Muricidae, I had high hopes of finding a number of species belonging to this family during the Stewart Island trip. *Zeatrophon ambiguus* (Philippi, 1844) was top of my list and although I had collected a reasonable number of these species throughout New Zealand, they were mostly small empty wash ups.

Vaila Voe in Paterson Inlet is renowned for its healthy population of this species and it was gratifying to see decent size *Z. ambiguus* in large numbers crawling around in the mud at low tide. Both male specimens (smooth shell) and female (more sculptured) were evident.

At Ringaringa Beach, in spite of persistent rain, I joined a small group of even more persistent shell collectors



and found good numbers of *Paratrophon patens* (Hombron & Jacquinot, 1848) and *Haustorium lacunosum* (Bruguière, 1789) living amongst blue mussels on low tide rocks. My Muricidae list concluded with finds of several empty *Xymene plebeius* (Hutton, 1873), plentiful live *Lenitrophon convexus* (Suter, 1909) and, at The Neck, one *Axymene aucklandicus* (E.A. Smith, 1902) in shell sand."

Graham Aamodt is a good shell spotter but another strong interest is land-based fishing. He writes of arriving well prepared:

"Before leaving Wellington I purchased a child's 5-foot telescopic fishing rod and reel from The Warehouse (where everyone gets a bargain). The rod concertinaed down to only about a foot and easily fitted into my case.

At times during the first few days I fished with the 'baby rod & reel' at the far end of Horseshoe Bay, on the fish factory wharf and the breakwater just past the wharf. Both spots were productive with the area inside the breakwater home to large blue cod. The water was only 4 or 5 feet deep and so clear you could actually see them taking the bait and therefore could strike at the right time. This was useful in that the undersize cod did not get the chance to swallow the hook, so were lip caught and easily released back to the water.

At my first go at the breakwater location I caught five cod with one at 43 cm and another at 38 cm; the other three were undersized and released. The baby rod and reel certainly got a work out and performed quite well. That evening we all tucked into an

entrée that included yummy fresh cod.

Unsuccessful fishing spots included Braggs Bay and the island at The Neck. One evening a few of us went back to Horseshoe Bay and fished off the wharf. A number of wrasse (aka spotties) were caught, along with a legal sized tarakihi that gave the little rod and reel a torrid work out.

Though I had fun fishing and the weather was unusually fine for most of the time, I did not catch my targeted species: the trumpeter. Having said that, at least I contributed to the diet of most of the group. Other things that stick in my mind from the trip were the happy social interaction of the group, the cheeky kakas – one even came right inside seeking (or stealing) yet another handout, being chased by a group of sea lions at The Neck, a fantastic visit to the Ulva Island bird sanctuary – where I saw a male saddleback feeding a female saddleback (love was in the air?), the various tracks and beaches, and the friendly folk of Stewart Island."

On 9 February, Jim and Leigh Crossland went to Mason Bay:

"We took off early in the morning from Stewart Island's airfield for the flight to Mason Bay. After making a fly by to check for obstacles, we landed safely on the hard sandy beach. It only took 15 minutes to fly to Mason Bay but the walk back across the island was much longer – five hours. We first had a quick check on the beach but it was almost entirely devoid of shells, dead or alive. The walk itself did not involve any hill work but plenty of muddy puddles, which slowed us down. We counted the birds we heard as we walked, five in total, one of which we briefly sighted – a robin.

The most interesting part of the walk was seeing the remains of the homestead (now a base for DOC workers). In this lonely spot, hardy souls farmed sheep amongst the surrounding swamp land, until the lease was finally relinquished in the 1980s. We encountered two other walkers during the day. The flora was mainly herbs and small shrubs until the latter part of the walk when we followed a small stream alongside which grew numbers of juvenile rimu. We arrived a little weary but in good time for the water-taxi at Freshwater Creek. Fortunately another walker had booked the water-taxi because the driver had no record of our booking! Otherwise, we would have been up the creek without a paddle, with the prospect of another full day's walk out."

In varying combinations of club members, this trip included one or more outings to (in no particular order): Halfmoon Bay, Horseshoe Bay, Vaila Voe, Maori Beach, Mason Bay, Ringaringa Beach, Deep Bay, The Neck and Cow Island, Ackers Point, Bathing Beach, Bragg Bay, Dead Mans Beach – plus an off-shore fishing excursion, a visit to Moturau Moana Garden and a bird-spotting trip to Ulva Island. We ate delicious meals including paua, crayfish, oysters, salmon and other fresh fish, thanks to numerous excellent cooks (and dishwashers), and everyone went to the pub for a meal on our last night on the island. It rarely rained, our beds were comfortable, and the company was excellent!

Photos: Thanks to all members of the party for taking many photos & to Roger Woods for setting up an easy way to share them.

A Night Out

by Mary Agnes Wotton

For the first time in its history, the Wellington Shell Club took advantage of a very low evening tide to do a night outing at Pauatahanui Inlet. This was on 12 March 2016 (before daylight saving ended), when the tide was -0.74 m at 7.32 pm.

Everyone brought a picnic supper which we ate in the little park at the start of the Camborne Walkway beside Grays Road below Camborne. Graham Aamodt had a few goes with a small dredge but did not find anything of interest at first. Under the soft muddy sand was a firm surface so it was not possible to dredge any deeper. Later in the evening he brought up two dead specimens of *Mesoginella pisinna* Marshall, 2004, a species that was not included in Wellington Shell Club's Bulletin No. 14 "A List of Molluscs occurring in the Pauatahanui Inlet" (1968). Both unfortunately had damaged protoconchs.

While it was still light we wandered along the rocky tide line running parallel to the walking track, with almost every footstep coming across a live *Alcithoe arabica* (Gmelin, 1791), half buried in the sand with its shell protruding, some of them devouring small *Maoricolpus roseus* (Quoy & Gaimard, 1834). One live and several small, dead *Haminoea zelandiae* (Gray, 1843) were also found. Almost every large rock that Kris Woods turned over, hosted one or two *Scutus breviculus* (Blainville, 1817) including one with its shell exposed.



Kris Woods, Jenny Raven, Jason Plaisted and I hung out until it was really dark, with headlamps helping the search along the tide line and having a bit of fun in the process! It was a beautifully calm evening with the water completely flat.

I returned to the Inlet in daylight on 5

June: again it was a low tide and no wind. The water was like glass! The only live species I saw were tiny *Notoacmea scapha* (Suter, 1907) on dead shells and small rocks, some *Buccinulum* species, a few *S. breviculus* under large rocks and only two live young *A. arabica*.

Photos from top:

The inlet at nightfall;
A. arabica with egg case;
Some of the crew hunting;
S. breviculus (left) and
A. arabica.



Photos:

Mary Agnes Wotton &
Jason Plaisted.



Pauatahanui Inlet - facts & recollections

by various contributors

Pauatahanui Inlet is the larger of the two arms of Porirua Harbour, its surface area estimated to be 469.97 ha in 2009 (Gibb & Cox, 2009). It is the only large estuarine wetland left in the lower half of the North Island and contains one of the most important salt marshes in the North Island. The area has a diverse local and migratory waterfowl and wading-bird fauna, and contains threatened fish species and endangered vegetation. The ecology of Pauatahanui Inlet is under threat from three primary sources - sedimentation, contamination and eutrophication (the increasing concentration of plant nutrients in a body of water).

The Guardians of Pauatahanui Inlet (GOPI) and community volunteers have carried out surveys of cockles - *Austrovenus stutchburyi* (W. Wood, 1828) - in the intertidal zone of Pauatahanui Inlet at three-year intervals since 1992, most recently in 2013. *A. stutchburyi* is the most abundant shore animal in the inlet, and is considered to be a “keystone species” - what is happening to them is considered to be indicative of the health of the inlet. In 1976 the (then) Department of Scientific and Industrial Research (DSIR) had surveyed the cockles: it found that cockles made up 80% of the biomass of the intertidal mudflat animals and, in parts of the inlet, cockle density reached 2500 per square metre.

No further surveys were done until the first carried out by GOPI in 1992. The National Institute of Water and

Atmospheric Research (NIWA) designed the survey to use volunteer labour and produce data comparable with the DSIR survey, and NIWA also analysed the data collected. The reports are available on the GOPI website and, in its summary of cockle monitoring, GOPI reports that between 1992 and 2001, the population size ranged between 35% and 50% of that of 1976. But since the low point in this series of surveys in 1995, there has been an 87% increase in cockle population size, reaching (in 2013) just over 64% of the estimated cockle population size in 1976 (Michael & Wells, 2014). And there is some optimism that the increase since 2001 is exponential and will continue on that track.

The GOPI surveys have continued to use the method designed by NIWA, are supported by Greater Wellington Regional Council, and the data continues to be analysed by NIWA. The long time series of data produced - a great example of citizen science - clearly shows that the intertidal cockle population is recovering from the severe downturn noted between 1976 and 1992.

Club member Margaret Richards and her husband Rhys have lived in the area since 1969. She remembers the harbour then as a wonderful food basket: with friends they would go cockle hunting and have al fresco dinners. But after living overseas from 1972-1975, she recalls “We returned to find significant change. Whitby was being developed, and the

sedimentation was becoming obvious. DSIR did a survey of cockle numbers; land development continued; sedimentation worsened. The first GOPI cockle count showed a huge crash in numbers.”

The 1993 Grange report, while it estimated the total cockle population to have reduced by more than half since 1976, could not define the causes(s) due to lack of information. It noted, however, a correlation between decreases in abundance and recruitment of cockles and development of catchments, including topsoil removal for housing.

Margaret got involved in the cockle counts and annual clean ups, and spent 5 or 6 years on the GOPI committee (she and Rhys are still members). She says there is much less rubbish now: “more bins are provided and people have a better attitude. The Camborne Walkway is a terrific resource. But bird life has plummeted – back in 1969 at night we would hear the sound of birds taking flight in such numbers that it would wake us up. Many bird species are no longer present, but there are some new arrivals, including the spoonbills that have arrived in the last ten years or so.”

The late Lesley Barnes is another club member who lived local to the Inlet for many years. She wrote of the “vanishing shells” of the inlet:

“I started my collection of recent shells in 2002. Pretty soon after, I realised that I had to confine it with some

parameters. My choice was Wellington Region, self-collected, already dead or, if pre-schoolers were with me, empty only. Over the years I have continued to replace earlier collected shells with bigger or better specimens, so unwittingly many Pauatahanui Estuary specimens were replaced. This explains why even my cockle specimens come from Eastbourne beach (much bigger and minus worm borings). I have kept some Pauatahanui Estuary cockle specimens out of respect.

Other species still included are:

Alcithoe arabica (Gmelin, 1791)

Panopea zelandica (Quoy & Gaimard, 1835)

Zemelanopsis trifasciata (Gray, 1843)

Marinula filholi Hutton, 1878

Xenostrobus neozelanicus (Iredale, 1915)

Haustrum scobina (Quoy & Gaimard, 1833)

Cominella adpersa (Bruguière, 1789)

Haminoea zelandiae (Gray, 1843)

Micrelenchus huttonii (E.A. Smith, 1876)

Diloma subrostratum (Gray, 1835)

Lunella smaragda (Gmelin, 1791)

Zeacumantus lutulentus (Kiener, 1841)

The last time my family collected cockles from the estuary was in 1997. No one died! I wouldn't risk it now though. Access to some of my favourite areas of the estuary has been reduced over time: crash barriers prevent easy access to parking, and fences prevent easy stopping. Increasingly the public is being channelled into fewer and fewer areas."

Lesley points to sedimentation as the most worrying feature of the Inlet: "I always used to wear sneakers when walking in the estuary shallows. These days I wear gumboots – easier to clean the sticky mud off. My next door neighbour regularly water-skied in the estuary in the south-east channel in the year 2000: back then, if he fell off he would have to swim, so the water in the channel must have been at least 1.8m deep. By 2013 the depth sounder in the same area recorded 700 mm. I can't remember the last time I saw anyone water-skiing in the estuary."

A 2009 report prepared for Porirua City Council reported that most of the inlet seafloor had shoaled from

sedimentation (from all causes) over the last 35 years (1974-2009): clearly shown in Figure 11 of the report. Its authors concluded (*inter alia*) that since human occupation and development of the catchments draining into Porirua Harbour, sedimentation rates have increased to 5-10 times above the geologic rate of 1.0-1.5mm/year. They further concluded that without immediate interventions to reduce average sedimentation rates from the current 5.7-9.1mm/year down to the natural rate, both the Onepoto Arm and Pauatahanui Inlet will inevitably finish up as brackish swamps, and the inlet will cease to function as an estuary.

The Porirua City Council's action plan for Pauatahanui Inlet can be viewed or downloaded at <http://www.pcc.govt.nz/Publications/Pauatahanui-Inlet-Action-Plan> and for the Porirua Harbour and Catchment Programme, go to <http://www.pcc.govt.nz/Publications/Porirua-Harbour-and-Catchment-Management-Programme>.

References:

<http://www.gopi.org.nz/>

GIBB, J.G., & COX, G.J. 2009. Patterns and Rates of Sedimentation within Porirua Harbour. Report prepared for Porirua City Council. Available at <http://www.pcc.govt.nz/DownloadFile/Publications/Harbour-Management/Porirua-Harbour-Patterns-and-Rates-of-Sedimentation-Report>

GRANGE, K.R. 1993. Distribution, Abundance & Population Structure of Cockles (*Austrovenus stutchburyi*) in Pauatahanui Inlet. Report prepared for the Guardians of the Pauatahanui Inlet. NIWA Oceanographic (NZOI) Report 1993/11.

MICHAEL, K & WELLS, J. 2014. Community survey of cockles (*Austrovenus stutchburyi*) in Pauatahanui Inlet, Wellington, December 2013. Prepared for the Guardians of Pauatahanui Inlet. NIWA Ltd., Wellington, New Zealand.

RICHARDSON, J.R., ALDRIDGE, A.E., MAIN, W.deL. 1979. Distribution of the New Zealand Cockle, *Chione stutchburyi*, at Pauatahanui Inlet. NZOI Oceanographic Field Report 14.

Cookia Vol. 12 2001 contains "Pauatahanui Inlet (Porirua Harbour): Recent and Subfossil Molluscan Associations" by John Marston together with "Pauatahanui Inlet: Natural and Human History – Background Information and Reference Sources" by Elliot Dawson.

2016 Australian Shell Show

by Pat Lakeman

The Australian Shell Show held during 15-17 April 2016 in Brisbane was a most enjoyable event. Kiwis were well represented: Kris and Roger Woods, Heather Smith and Graham Aamodt and I attended, and Kevin and Yvonne Mead visited while en route to their holiday in Japan. This was the first time that the Brisbane Shell Club had used the Gaythorne Bowls Club as a venue, and anyone who helped organise the last NZ Shell Show in Wellington will know that a new venue means a lot of extra work and uncertainty.

There was great buzz of interested people when the show opened on the Saturday morning, and it had a really international flavour, with visitors from all over Australia and New



Zealand, New Caledonia, the Philippines, Taiwan, USA, Italy, France and Russia. There were 14 dealers in the centre of the hall, so it was very hard to keep one's wallet in one's pocket! There was a beautiful display of high quality shells across the 75 'boxed' entries and shell photographs, plus a further 37 single-shell entries in the 'shell of the show' and 'wow factor' categories.

As always, a highlight of the event was to meet up once again with a lot

of the friends that we have "collected" over many years of shelling. Congenial breaks from any serious business were easily taken. It was also good to win prizes, and I was proud that one of my two firsts was for Worldwide Cassidae, a class in which the standard is always high. Heather won 13 first prizes with her amazing exhibits and usual aplomb!

The show finished on a real high for Shirley and Robert Ellis – Shirley won the shell show raffle which was a rare and expensive *Zoila friendii kostini* Lorenz & Chiapponi, 2007.

Overall a well organised, friendly and lively show that reflected – and well rewarded - a lot of work by members of the Brisbane Shell Club.



Left: One of Heather Smith's prize-winning exhibits.

Above: The show crowd.

Right: President of the Brisbane Shell Club Sally Johnsen awards the shell show raffle to Shirley Ellis.

**Photos:
Desley Willgoss & Pat Lakeman**



Not your average CAT scan ...

Computed tomography is an imaging procedure that uses special x-ray equipment to create detailed pictures, or scans, of areas inside the body. It is also called computerized tomography and computerized axial tomography (CAT). This beautiful scan of a wentletrap shell was created by Afnan Ahmed M Malaih, Teaching Assistant in the Department of Diagnostic Radiology, Faculty of Applied Medical Sciences, King Abdulaziz University, Jeddah, Saudi Arabia.

http://www.kau.edu.sa/ImageGallery.aspx?Site_ID=0012718&LNG=EN&Gal=2818

Colour Variation:

Cellana radians (Gmelin, 1791)

by Mary Agnes Wotton

Of all the New Zealand species of Nacellidae, *Cellana radians* is the most common and most variable, with many forms. It can sometimes be a bit tricky to identify. However, since the other species are more stable and distinctive in their appearance, comparisons with them will help. The yellow radians however, could be confused with *Cellana flava* but only a few irregular black/brown radial stripes might appear in young specimens of *C. flava* towards the margin instead of on the entire shell.

Reference:

POWELL, A.W.B. 1973. Patellid Limpets of the World. Indo-Pacific Mollusca, vol. 3, No. 15.

- A) Stewart Island B) Otago Peninsula C) Cathedral Caves, Catlins Coast
D) Breaker Bay, Wellington E) Auroa Point, Mahia Peninsula F) South Island



Forty Years On

by Pat Lakeman

For its first 20 years, the Wellington Shell Club produced first circulars (1956-1965) and then bulletins (1967-1975). In 1976 the first issue of *Cookia* was produced, and this little retrospective is a sincere "Happy 40th Birthday" wish for our cherished publication.

The circulars and bulletins had been produced by John Marston (1968-1971), Frank Climo (1972-1973) and Mary Agnes Wotton (1974-1975). At the AGM in November 1975, Mrs Mary Wotton said that she could no longer continue as editor of the Bulletin, and Mr Trevor Ritzema was elected editor and librarian.

In the minutes of the meeting held on Thursday, 29 January 1976, it is recorded that a card of congratulations was sent to Mrs Wotton on the arrival of her baby daughter. The following month a special general meeting was held at which the subscriptions were debated at length but also, members were alerted to the imminent issue of our new club magazine, *Cookia*. The first issue – Vol. 1, No. 1 – was handed out at the meeting in March 1976, just prior to the club's 21st celebrations in May. It comprised 30 single-sided pages, with pale blue covers, endorsed 'Autumn 1976' under the cover drawing of a *Cookia sulcata* (Lightfoot, 1786) by R.C. Brazier of NZ Geological Survey.

Cookia continued in that format – at first produced by Gestetner (younger readers will have to Google that) and later by photocopier, moving to

double-sided pages in 1985 and then again (permanently) in 1991. At least two issues per year were produced until 1982, then one issue per year was produced 1983-1985. Vol. 6, No. 1 was issued in October 1985, but Vol. 6, No. 2 did not appear until March 1989. No *Cookia* was produced in 1990, but then issues became annual since 1991, with the exception of 1994. Since 1997 they have carried just a volume number. For Vol. 7, No. 4 to Vol. 11 (December 1996-2000) the cover illustration was a drawing by Jill Burnett; then another unknown hand produced the illustration 2001-2004.

Editors after Trevor Ritzema had been Bill Paul (1979-1982) then Ken Grange (1983-1990). In 1991 Elliot Dawson took over, and steered the helm with a steady and scholarly hand, himself contributing much excellent content (both good science and entertainment!), for a period of 14 years. 2005 saw the first issue with Selwyn Bracegirdle as editor. As principal of Creatus Design, Selwyn brought his graphic design skills to bear, and *Cookia* entered a new age – handsomely designed and commercially printed. Then, in 2012, your current co-editors Kerry Walton and myself took over, aiming to maintain the high standards of editors past and to ensure that all club members find *Cookia* of interest.

An index had been produced to the three issues of Volume 1, then in December 1996, all Wellington Shell Club publications were indexed by

Jill Burnett, which formed *Cookia* Vol. 7 No. 4. In 2003, two volumes were published, the first in June being a special edition: Jenny Raven's compilation of "The Wellington Shell Club Lists" in Volume 14. In December 2014 a *Supplement to Cookia* Volume 26 comprised a new index, to all the club's publications 1956-2014. The sterling work of Jill Burnet and Elliot Dawson, this is available online on our club website: <http://www.wellingtonshellclub.org.nz/publications>. It is fully searchable, making the resources of the club's publications, including *Cookia*, very accessible. Happy 40th birthday, *Cookia*, and many happy returns.

Acknowledgements:

Grateful thanks to Jill Burnet for her help with researching this item. Also, in respect of the title, to Alan Bennett, Edward Bowen and John Farmer, and Harrow School. (For those of you who enjoy non-molluscan trivia, "Forty Years On" is, among other things, a song written by Messrs Bowen and Farmer in 1872 which is the school anthem for Harrow School; it is also the title of a very good 1968 play by English author and actor, Alan Bennett.)

Notes on NZ Collected Species

Craypot finds, Stewart Island

It really pays to look in craypots for shells; besides containing the odd, deep water circular saw or similar, the empty pots are often encrusted with debris from the sea bottom which can be a treasure trove for minute, deep water shells. On the club's February trip to Stewart Island we found a large stack of empty crates in an Oban side street. I should have taken more material from them because a look under the microscope revealed some lovely shells - special for me among them were *Specula retifera* (Suter, 1908), *Perrierina subquadrangula* Dell, 1952, *Fusceulima murdochi* (Hedley, 1904), and *Philobrya meleagrina* (Bernard, 1896).

JENNY RAVEN



Photos top & left, clockwise:
Perrierina subquadrangula;
Philobrya meleagrina;
Fusceulima murdochi;
Specula retifera.



Tutufa bufo (Röding, 1798)

Found in beach-drift, north of Paxton Point, at the mouth of Tauwhia Stream, Great Exhibition Bay, Northland on 28 January 2016, this shell measures 95 mm.

KERRY WALTON



Charonia lampas

(Linnaeus, 1758)

Brought along to the Club's May meeting by visitor Tony Cross, this handsome specimen measured approximately 205 mm and was collected at Pukerua Bay.



Mammilla simiae (Deshayes, 1838)

This shell measuring 19.0 mm, was found in dried seaweed and other debris, very high on the beach at Taupiri Bay, on 25 October 2015.

PAT LAKEMAN

Maurea waikanae Oliver, 1926 ... aka beach treasure!

I was plodding along Claverley Beach, south of Kaikoura, on 11 April 2016, glumly thinking that this beach, like so many other beaches, is not what it used to be. Hardly anything washes up these days. The tide line around the little point that used to be so interesting, was just a flick of fine red seaweed, plus absolutely nothing, and this was just a waste of time and energy ... WHAT IS THAT?! A lovely *Maurea waikanae*, sitting all alone on the tiny line of red seaweed!

These are so rare down here; I almost forget that the species exists. From Marfells Beach I have found one, battered and broken, and one live with the top of the spire missing. From Kaikoura, not even one, in the 40 years I've lived here. From Claverley, three – badly broken. From away down the coast towards Waiau Mouth, a 38 mm example in reasonable condition, with operculum.

This one is 41 mm, complete with spire, lip, attractive brown splotchy pattern, and animal, though no operculum. It was enough to put a spring in my step that lasted the full length of the beach to Okarahia and back. Usually I would return by the Railway road, which is easier going, thinking that walking the beach twice is hardly worth the effort, except for two areas that can be more worthwhile. But apart from that one lovely shell, it was a very bare beach indeed.

BEV ELLIOTT



Alloiodoris lanuginata (Abraham, 1877)

When I came to live in Kaikoura in September 1976, one of the first things I noticed when I went shelling, was how many sea slugs there were here. Apart from large numbers of *Bursatella leachii* Blainville, 1817 at Tryphena, Great Barrier Island back in the 1950s, I've never seen so many sea slugs. It's a pity my knowledge of them was limited to the colour plate in Dr Powell's book. There was no internet back then, and I wasn't into close up photography. I did enquire at the Marine Lab, and was told "That's a nudibranch!" which wasn't very helpful.

Over the years they all disappeared, even the commonest one, the "sandpaper slug" which I named for its rough texture. (*B. leachii* seemed to disappear from Tryphena too; there wasn't a sign of one when I went back in 1994.) Maybe these soft creatures without shells would be the first to succumb to pollution, however slight. In later years, however, there have been a few around Kaikoura again, and Megan at the Kaikoura Aquarium arrived with books of coloured photos of



sea creatures, plus a computer on which we could look for pictures of them.

After nearly 40 years of wondering about the sandpaper slug, suddenly we found a name for it, *A. lanuginata*. And on 25 November 2015 I found a lovely big one near the Marine Lab. About 70 mm ... but how do you accurately measure a sea slug? I did get some photos of it, but its stay at the Aquarium was unfortunately only 2 or 3 days, before some other critter decided that it would make a good meal.

BEV ELLIOTT

Tritia burchardi (Philippi, 1849)

This is a common whelk in subtropical and temperate regions of Australia. In April 2009, two shells of this species were found in Auckland's Waitemata Harbour. Between June 2009 and February 2010, over 20 living specimens were found at various sites in the central Waitemata Harbour area.

This is an adventive species and the Museum of New Zealand Te Papa Tongarewa collection contains records from Whangarei Harbour and the Waipu River Estuary, as well as various locations in the Waitemata Harbour. Richard Willan, Bruce Hayward and the late Margaret Morley are joint authors of a paper in preparation on this species. It is clearly spreading. Margaret and her daughter found a living population at Man O' War Bay on Waiheke Island in December 2015 (M. Morley pers. comment). This specimen measuring 11.9 mm was found in October 2015 at Brick Bay, Kawau Bay.

PAT LAKEMAN

References:

GALINDO L.A., PUILANDRE N., UTGE J., LOZOUET P., BOUCHET P. 2016. The phylogeny and systematics of the Nassariidae revisited (Gastropoda, Buccinoidea). *Molecular Phylogenetics and Evolution* 99: 337-353

TOWNSEND, M., MARSHALL, B.A., AND GREENFIELD, B.L. 2010. First records of the Australian dog whelk, *Nassarius (Plicarularia) burchardi* (Dunker in Philippi, 1849) (Mollusca: Gastropoda) from New Zealand, New Zealand. *Journal of Marine and Freshwater Research* 44: 343-348.



Dendrodoris krusensternii (Gray, 1850)

This species is widespread in the tropical and more temperate Indo-West Pacific. Its colouring is variable but usually vibrant with conspicuous patches of brilliant blue. It occurs on semi-sheltered coasts on the east side of northern New Zealand, and this specimen (about 60 mm) was seen in a rock pool at low tide at Te Arai Point in October 2015. Richard Willan reports seeing lots of them at Beachlands, Auckland, in May 2016, including some tiny juveniles of 8 mm extended crawling length.

PAT LAKEMAN



The King is Dead: *Placostylus hongii* (Lesson, 1830)

I am reminded of a tongue in cheek article titled 'Its name is George' by Jill Burnett that appeared in *Cookia* volume 22, detailing how certain snails came about their names. Quite recently I came across a snail whose name is very well-known yet appears in no published check-list, at least, not any about snails. Its name was Richard.

With the late afternoon sun on my back and the good company of Kevin Burch and Mike Young, I went for a short and relaxing stroll in the hills behind Whangarei. Near the coast I spied the striking chocolate brown turret of a *Placostylus hongii* (Lesson, 1830) emerging from the litter and soon realised that I was in exalted company. In my hand was an empty shell with the name 'Richard II' neatly etched near the aperture. [Bruce Marshall suggests this is likely the work of Richard Parrish – Ed.]

Etching a number into the periostracum of a large snail is one method frequently used by the Department of Conservation to monitor snail growth and survivorship in catch-and-release experiments. Naming the snail is likely a light-hearted spin on this technique. I wonder though, how well *Placostylus* spp. would fare in snail races...

KERRY WALTON



Casmaria perryi (Iredale, 1912)

A number of *Casmaria perryi* have been found hermit-crabbed in the rock-pools SE of Bland Bay over the years, yet none by me, despite numerous visits. This large (53 mm) example arrived completely unexpectedly in the post (labelled simply "Bland Bay"), hidden in a bag of mixed, damaged and mainly tropical shells that I had bought reasonably cheaply because it contained a couple of land snails from Papua New Guinea that I wanted.

The living specimen figured was collected at night, on sand at the base of rocks, in about 15 m of water at the Kermadec Islands where the species is more common.

KERRY WALTON



Alcithoe jaculoides Powell, 1924

Trawled in 212 m of water SW of Cape Maria van Diemen on hard sand and papa rock. 181 and 205 mm.

KEVIN BURCI



Aplysia juliana Quoy & Gaimard, 1832

by Bev Elliott

On 6 May 2016 it was dull and very calm, with a 0.2 m low tide. I was out collecting for Kaikoura Aquarium, when a prominent splash of yellow/orange caught my eye, about a metre long, and up to several centimetres high. I knew what that was! Back in the 1970s when I first came to Kaikoura, I would occasionally find *Aplysia juliana* alive at low tide, or washed ashore after storms. But I had not seen one of those big sea hares for many years, although now and then I would find small pieces of their golden egg mass washed up, so I knew they must still be around. Yes, they are still around, and there were quite a lot of them hiding in the seaweed under the ledge where they had laid their eggs.

What a scurry – a few quick photos, then I rushed back to the aquarium with 2 pairs of them, and a sample of their eggs. Hazel quickly prepared a tank for them, then she and Fay (who also works at the aquarium) and I went back to where I'd found them. We were soon joined by our keen nature photographer, Ailsa Howard, to whom Hazel had sent a text. Ailsa was at the hairdresser's when she received the text to come NOW, as the tide was already coming in. She didn't say whether she stayed for the rest of her hairdo, or bolted immediately. She could be trusted to have her camera at her side in all situations, but her footwear and clothing had not been chosen for splashing around in rock pools, so it was all rather hilarious.

Our excitement attracted the attention of some tourists. We tried to explain that sea hares are not edible ... but back at the aquarium, Hazel and I were taken aback to learn from Google that they are edible!

At the aquarium, Hazel was kept busy supplying the *Aplysia* specimens with sea lettuce to eat, and they continued to lay eggs. They shared their tank with other sea slugs, a whopper *Doris wellingtonensis* Abraham, 1877, three *Alloiodoris lanuginata* (Abraham, 1877), a *Pleurobranchaea maculata* (Quoy & Gaimard, 1832), a pair of *Dendrodoris citrina* (Cheeseman, 1881), and a very beautiful orange/yellow sponge, *Polymastia granulosa*, that is the same golden colour as their eggs. The aquarium provides a great opportunity for little glimpses of the lives of sea creatures that we would probably overlook as we search for more shells for our collections.

I wonder which is best – a drawer full of dead shells that we can treasure for maybe a whole lifetime, or living creatures that live only until a bigger mouth arrives on the scene. Some of the critters I've taken to the aquarium don't even reach the bottom of the tank before they're snapped up. Others live there, apparently quite happy, for many months.

Three weeks later I went back to the aquarium, eager to see how my *Aplysia* specimens were doing. But Hazel had gone. And Fay, trying to manage the aquarium alone, had found them too much to cope with.



Top photo: *A. juliana* eggs on rocks at The Point, Kaikoura.

In the tanks at the Kaikoura Aquarium (top to bottom):

A. juliana

A. juliana and *Doris wellingtonensis*

Polymastia granulosa

She had to gather quantities of sea lettuce to feed them. She had to change the water in their tank twice a day, as it was clouded with shredded sea lettuce that needed to be eliminated, and with tiny *Aplysia* babies, hatched from the eggs the adults had laid, which needed to be retained if possible. It was too much, and she finally released the whole lot into the nearby rahui. Here they would be safe from hungry tourists ... at least from those who obeyed the 'no take' rules. But other hungry

marine creatures wouldn't know the rules. Life is a battle, and only the very lucky survive for a while.

June 6 was a beautiful calm fine day with a 0.2 m low tide, and the barometer higher than I'd ever seen it, to push the tide still lower. Ted and Ailsa Howard came with me, wading across the channel to Seal Island, where splashes of golden-yellow 'spaghetti' on the rocks indicated that *Aplysia juliana* were still spawning. Ted found some tucked under a ledge, and we pulled out about 14 of them

and placed them in a shallow pool, hoping for some good photos. But brown blobs do not make good photos, and very few of them were going to co-operate. When I came back a while later, they had not crawled back under their ledge, but had burrowed down into the white stones, and if you didn't know that's where they were, you'd never spot them, almost completely covered. No wonder I haven't found any in the last 30+ years!

A Widespread Epitoniid: *Cycloscala hyalina* (G.B. Sowerby II, 1844)

by Bert van Tiggeler

In December 1979, I went with friends on a diving trip to Aquaba, the only coastal city in Jordan, at the north of the Red Sea. Even in winter, the water is warm and clear. For a good dive, you first cross over large coral banks before going into deeper water.

During that trip I took a shell sand sample from the beach for examining at home. For many years I did not have enough information to identify the shells. Nowadays, with the internet, a lot of information can be found about tropical shells.

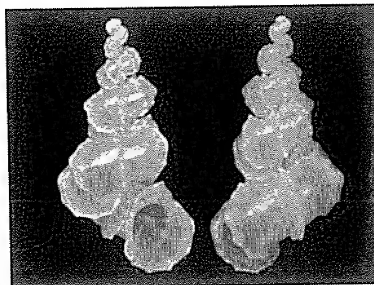
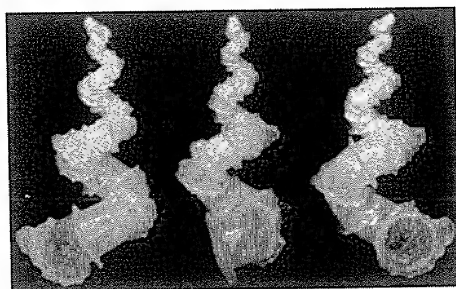
A pleasing find in my sand material was *Cycloscala hyalina*, (G.B. Sowerby II, 1844) - a shell that belongs in the family Epitoniidae. It is a small (to 5 mm), translucent gastropod, and the whorls are unusually coiled. The degree of separation of the coiled whorls can vary widely, as can the angle between the protoconch and the teleoconch axis.

The reason for disjunct coiling of shells is not clear, but one suggestion is that it may prevent some mud-dwelling species from sinking into

sediment because the weight of the shell is spread over a relatively larger area: Thayer's (1975) "snowshoe" effect.

This small shell is not only unusually formed, but very widespread: occurring in the Atlantic, Indian and Pacific oceans.

Cycloscala cf. *hyalina*. [The 'cf.' basically means like and most probably— Ed.] has also been found in the waters of New Zealand, around the Kermadec Islands. A really wide spread epitoniid!



Far left & left: *C. hyalina* from the Mediterranean (www.conchigliedelmediterraneo.it/) & from the Philippine Islands.

Right: Bert's drawing of his *C. hyalina* from the Gulf of Aquaba



Reference:

THAYER, C.W. 1975. Morphological adaptations of benthic invertebrates to soft substrata. *Journal of Marine Research* 33: 177-189.

New Zealand's Protected Snails and the Wildlife Act

by Kerry Walton

As the email contact of the Wellington Shell Club, I was frequently asked by prospective tourists if some or all shells are protected in New Zealand.

No seashells are fully protected in New Zealand although toheroa - *Paphies ventricosa* (Gray, 1843) - requires a customary permit to collect live and size restrictions apply to live-taken paua (*Haliotis iris* Gmelin, 1791 and *H. australis* Gmelin, 1791) and scallops (*Pecten novaezelandiae* Reeve, 1852). It is illegal to collect or disturb anything within a marine reserve including beached and empty shells that are below the high-tide line. I suspect this is something of a grey area though and whilst a dead-collected shell would not likely cause much fuss, it is advised not to take anything from near such reserves to avoid any hassle. Marine reserves are usually well signposted or can be located online. I advise against the collection of land snails completely as a permit is required to collect on most public land and the larger, more charismatic snails are all fully protected anyway (see below).

For many years, I was under the impression that it was legal for a shell collector to possess the shells of *Powelliphanta*, *Paryphanta* and *Placostylus* land snails provided they had been collected prior to 1980 when the genera acquired protected status under the section 7B amendment of the Wildlife Act. This view was shared by friends working in the

conservation sector whom I had contacted seeking clarification, although, like me, they had not actually gone and checked the legislation. Perhaps an unconscious notion of '*don't ask, don't tell*' conserved this ignorance. Niggling in the back of my mind was the knowledge that the possession of any protected New Zealand corals was illegal irrespective of the date of collection and impeccable proof of provenance. Why should our large land snails be any different?

What prompted this delving into the law books was my realisation that only ten of the 14 named species of *Powelliphanta*, together with *Paryphanta busbyi* (Gray, 1850), were listed in the convention governing international trade in endangered species (CITES) when it came into effect in 1975 and then, unaccountably, these were subsequently de-listed in 1997. These species could then, in theory, be traded internationally.

The Wildlife Act of 1953 and subsequent amendments confer legal protection to a range of native species and conservation land as well as establishing a framework for the prosecution of those who act in breach of the act. It is a cautiously and curiously worded document and amusingly treats 'animal' as a term ambiguous in definition. Section 7B was added in 1980 and conferred full and formal protection upon a selection of invertebrates supplied as

'schedule 7'. Further amendments adding additional taxa are proposed but presently featured Mollusca include:

Pupinidae

Cytora hirsutissima (Powell, 1951)

Cytora tepakiensis Gardner, 1967

Rhytididae

Paryphanta (all species)

Powelliphanta (all species)

Rhytidarex buddlei (Powell, 1948)

Bothriembryontidae

Placostylus (all species)

All wildlife not listed in schedules one through to six, is absolutely protected throughout New Zealand and 'New Zealand fisheries waters' (Part 1 section 3). No-one may kill or have in their possession any protected wildlife, living or dead without a permit. Possessing the shells of any snails listed above is, thus, illegal irrespective of when one came to possess them. Although, in theory one might trade such snail shells overseas without a CITES permit, possessing them in New Zealand territory is illegal making trade hypothetically impossible.

Many of our large snails live in small colonies comprising fewer than 100 individuals and often occupy small areas despite seemingly suitable habitat immediately alongside. Even the more common species have sold for reasonable sums in recent auctions and only a little collecting pressure would be required to send some of the

more at risk colonies or forms into extinction. For this very good reason, these groups are protected. Collectors with an interest in land snails are strongly urged to leave live snails undisturbed. The penalties for breaching the Wildlife Act can be considerable.

Officials may show leniency to a collector who has not collected or killed such species themselves or recently. To slap a sizeable fine on

someone for having an old piece of black coral or a *Powelliphanta* shell on a mantelpiece hardly endears the ministry to public opinion. Anyone with just a few corals or protected snails in their possession is unlikely to be at the receiving end of an unpleasant and unexpected official visit, but the potential is certainly there, and the laws are in place for a good reason. If anyone is unsure or wants advice on what (if anything) to

do with a collection, I would be glad to talk.

NOTE: Fossils too are protected by the New Zealand Protected Objects Act affording them the same level of protection as Maori stone tools. Possessing them requires one to be a registered collector and their export is illegal without Ministry approval and paperwork. Again, defining a fossil in this context can be a grey area.

What to do with all those spare shells!

by Pat Lakeman

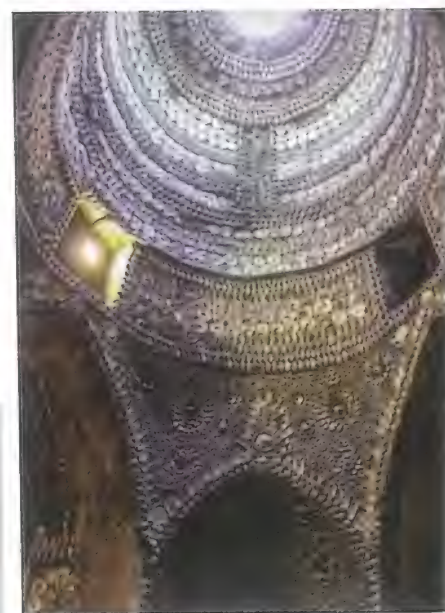
Derrick Crosby drew our attention to a quirky way to use up spare shells - but you will need about 4.6 million of them to recreate the Margate Shell Grotto. Was this amazing underground construction a prehistoric astronomical calendar? Or is it somehow connected with the Knights Templar or Freemasonry - or was it an 18th or 19th-century rich man's folly? Or someone's answer to chronic boredom, or an early unemployment scheme ... ?



No-one knows its purpose so hypotheses abound – dating it to any time in the past 3,000 years. It was discovered in 1835, by accident. In 1838, it was opened as a public attraction, has remained in private ownership ever since, and now has heritage protection. The Grotto comprises a winding passageway, with arches and a circular column and a shaft that lets in light from the surface, ending in a rectangular room.

Credits: https://en.wikipedia.org/wiki/Shell_Grotto,_Margate;
<http://shellgrotto.co.uk>;
<http://www.amazfacts.com/2015/06/the-mystery-of-margate-shell-grotto.html>

Most of the walls and roof are covered in mosaics made from shells - about 190 square metres of mosaic. The shells most frequently used - mussels, cockles, whelks, limpets, scallops and oysters – are mostly local species. For various reasons the shells have largely lost their colour, but the centre photo shows a modern recreation of a panel to give an idea of the original look. Other shell grottoes exist, but the Margate one is possibly the most spectacular.



Microspecies from Maitai Bay

by Mary Agnes Wotton

Beautiful Maitai Bay, consisting of two crescent shaped coves, is located on the north east coast of Karikari Peninsula and is one of the northernmost bays in New Zealand. Back in 1988-89 it was a day trip from our family holiday at Coopers Beach, after experiencing 2 cyclones at the camp site.

In the shallow area of the beach by the rocks pictured to the right in the photo, was a small amount of shell sand which I collected and brought home. Although I had been in New Zealand since 1971, joining the Wellington Shell Club that same year, back then I was very unfamiliar with microspecies. It took me many years

to identify, with the help of Bruce Marshall, 55 of the species found in this shell sand – 53 gastropods and 2 bivalves.

Thirteen
Zemitrella
specimens
(Family:

Columbellidae) are still unnamed as to their species. Most of the species were limited to one or two specimens only. Several of them were uncommon and two were rare –
Naricava neozelanica Powell, 1940 (reported in *Cookia*, 2011) and
Nepotilla nitidula Powell, 1940.



A 2014 paper by Morley & Hayward reminded me that I had a list of the species I collected. When comparing it with the list of 86 species of marine molluscs recorded from 16 dredge stations in the 2014 paper, 42 of my species were not among them.

<i>Amphithalamus semen</i> * (Odhner, 1924)	<i>Fossarina rimata</i> * (Hutton, 1884)	<i>Pisinna subrufa</i> * (Powell, 1937)
<i>Aoteatilia larochei</i> * Powell, 1940	<i>Laevilitorina aucklandica</i> * (Powell, 1933)	<i>Pisinna rekohuana</i> (Powell, 1933)
<i>Assimineia vulgaris</i> * (Webster, 1905)	<i>Merelina coronata</i> * (Powell, 1926)	<i>Pisinna zosterophila</i> * (Webster, 1905)
<i>Asteracmea suteri</i> * (Iredale, 1915)	<i>Merelina crossaeformis</i> * (Powell, 1926)	<i>Pusillina hamiltoni</i> (Suter, 1898)
<i>Austromitra rubiginosa</i> (Hutton, 1873)	<i>Merelina lyalliana</i> (Suter, 1898)	<i>Pusillina latianbata</i> * (Ponder, 1967)
<i>Chemnitzia</i> sp	<i>Merelina manawatawhia</i> * Powell, 1937	<i>Risellopsis varia</i> * (Hutton, 1873)
<i>Dentimargo cairoma</i> * (Brookes, 1924)	<i>Merelina superba</i> * Powell, 1927	<i>Rissoina chathamensis</i> * (Hutton, 1873)
<i>Eatoniella albocolumella</i> Ponder, 1965	<i>Merelina taupoensis</i> Powell, 1939	<i>Roseaplagis rufozona</i> * (A. Adams, 1853)
<i>Eatoniella flammulata</i> * (Hutton, 1878)	<i>Mesoginella aupouria</i> * (Powell, 1937)	<i>Seila cincta</i> (Hutton, 1886)
<i>Eatoniella lampra</i> * (Suter, 1908)	<i>Mesoginella koma</i> * Marshall, 2004	<i>Serrata fasciata</i> * (Sowerby II, 1846)
<i>Eatoniella limbata</i> * (Hutton, 1883)	<i>Naricava neozelanica</i> * Powell, 1940	<i>Simulamereina gemmata</i> * (Powell, 1927)
<i>Eatoniella lutea</i> * (Suter, 1908)	<i>Neoguraleus murdochi</i> * (Finlay, 1924)	<i>Tridentifera roseoculma</i> * Ponder, 1966
<i>Eatoniella mortoni</i> * Ponder, 1965	<i>Nepotilla nitidula</i> * Powell, 1940	<i>Turbonilla zealandica</i> * (Hutton, 1873)
<i>Eatoniella olivacea</i> * (Hutton, 1882)	<i>Notoacmea subtilis</i> (Suter, 1907)	<i>Zemitrella fallax</i> * Powell, 1940
<i>Eatoniella roseola</i> (Iredale, 1915)	<i>Onoba iredalei</i> * (Powell, 1937)	<i>Zemitrella</i> spp. (13 unidentified)
<i>Eatonina atomaria</i> * (Powell, 1933)	<i>Philina umbilicata</i> * Murdoch & Suter, 1906	
<i>Eatonina micans</i> (Webster, 1905)	<i>Pisinna subfusca</i> * (Hutton, 1873)	
<i>Epitonium jukesianum</i> * (Forbes, 1852)		
<i>Epitonium minorum</i> * (Iredale, 1936)		
<i>Fictonoba carnosa</i> * (Webster, 1905)		

* signifies not listed in
Morley & Hayward paper

References:

- MORLEY, M.S & HAYWARD, B.W. 2014. Biodiversity and distribution of Ostracoda, Foraminifera and Micromollusca of Matai Bay, Northland. Records of the Auckland Museum Vol. 49 (2014), pp. 55-80.
- RAVEN, J., & BRACEGIRDLE, S. 2010. New Zealand Seashells Visual Guide. Creatus Design, Wellington, NZ.
- Cookia* Volume 23. 2011. Publication of the Wellington Shell Club.

A Little Latin is a Dangerous Thing

by Jill Burnet

A surprising number of people, and not just shell collectors, say to me that they wish they had had the opportunity, or had taken the opportunity to learn Latin. If you want Latin to help you make sense of the 'Latin' names of plants or animals, you probably already know more than you think. I am sure that the many keen gardeners among you know that '*rosa*' is the Latin for rose. The adjective from this is *roseus* meaning 'of roses' or 'rose-coloured', and if you look in the index of a shell book you will find that a lot of shells are rose coloured – *Phenatoma rosea* (Quoy & Gaimard, 1833), *Zemitrella rosea* (Hutton, 1873), *Maoricolpus roseus* (Quoy & Gaimard, 1834), *Vexillum roseum* (Broderip, 1836).

Don't be put off by the changes to the last syllable. In English we add 's' to the end of a lot of nouns to show that they are plural. Latin is a highly inflected language – the ending of a noun not only tells you whether it is singular or plural, but also whether it is masculine, feminine or neuter (sorry, feminists, the endings are always given in that order), and the

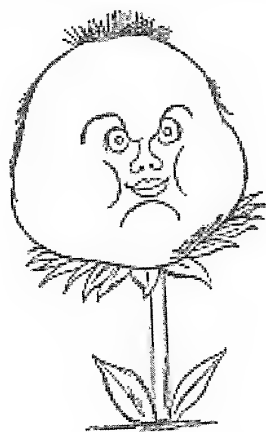
part of the sentence – subject, object, etc. Adjectives are inflected to agree with the noun they qualify; this explains why, when the genus changes, the ending of the species name sometimes changes. Unless you are in the happy position of naming a species, you don't need to worry about it, except to check that you've got the ending right when you are doing your labels.

Another word you all know is *stella*, star, which gives us the English word stellar – even if you don't read science fiction, even if you don't actually believe in it, you know what is meant by interstellar travel, and when you pick up a *Cellana stellifera* (Gmelin, 1791) you hope to see a nice star pattern in the middle of it. And, just as you would expect, *pallidus* means pale or pallid.

Not so obvious is *crassus*. Crass, derived from *crassus*, is listed in the English dictionary with two meanings, firstly thick, dense, and secondly dull, stupid. Probably if you use the word crass at all, it is with the second meaning nowadays, but of course no shell is dull or stupid! However it may be thick or solid, like *Turbo crassus* W. Wood, 1828, or *Laevicardium crassum* (Gmelin, 1791). You will find *crassus* used in compound words such as *crassicosatus* – with thick ribs. *Costa* is a rib, plural: *costae*, ribs. This is a useful word to know, as books with aspirations to high status and

erudition use words like *costate* when describing shells. They might also describe a gastropod shell as paucispiral – '*paucus*' is few, think of the English word paucity. So *Pleuromeris paucicostata* Laws, 1940 is a *Pleuromeris* species with fewer ribs, and you can all work out that *multicostatus* means with many ribs. Multus, much or many, is often combined with other words just as in English – multi-coloured, multilingual. *Multum in parvo*, much in little, a great deal in a small amount, is a good Latin tag to drop into your conversation.

But beware – I started by saying a little Latin is a dangerous thing. Not all the 'Latin' names are actually Latin, or even Greek. Many proper nouns are used, names of people or places – look at how many of our shells are described as *zelandicus*, *neozelandicus*, *novaezelandiae*. And, whatever may have been the case in Linnaeus's day, nowadays there are many words from other languages, and they won't be in your Latin dictionary. Edward Lear's *Nonsense Botany* provides some extreme but



Phattfacia Stupenda.



Bottlephorkia Spoonifolia.

Picture credits:
<http://www.lear200.com/>

amusing examples of this. His genus *Phattfacia* comprises two good old English words fat and face joined together, the spelling tweaked, a suitable ending added and you have a word with a Graeco-Latin air. My title for this piece is of course a misquote. Alexander Pope actually wrote "A little learning is a dangerous thing." It was just too easy and too tempting to change 'learning' to 'Latin'. I am going to finish – at last – with another quote. T.H. Huxley had also read Pope and made this rather

discouraging comment: "if a little knowledge is dangerous, where is the man who has so much as to be out of danger?"



Washtubbia Circularis

References:

HUXLEY, T.H. 1882. Science and Culture: And Other Essays. D. Appleton & Company, New York.
 LEAR, E.. Nonsense Botany and Nonsense Alphabets, etc. etc. 1889. Frederick Warne & Co., London.
 LEWIS, C.T & SHORT, C. 1879. A Latin Dictionary. Harper & Bros., New York.
 POPE, A.. An Essay on Criticism. 1711. W. Lewis in Russel Street, Covent Garden, London.
 The Shorter Oxford English Dictionary. 6th edition, 2007. Oxford University Press.

Paua Pearls

by Pat Lakeman

Blue pearls, or paua pearls, as seen in modern jewellery are usually cultivated pearls, created in a similar way to traditional round cultivated pearls in oysters – a process pioneered by Kokichi Mikimoto in 1890. Production of the first hemispherical pearls in abalone is attributed to French scientist Louis Boutan, at around the same time. But Boutan abandoned his efforts due to the difficulties of raising abalone.

New Zealander Roger Beattie pioneered the commercial production of paua pearls, establishing the first ocean based blue pearl farm at Whangamoe Inlet on the Chatham Islands. Paua pearls do happen naturally, however, and club members have at least one, and possibly two, examples between them.

Club member Vivienne Robertson has a delicate necklace set with a tiny paua pearl discovered by her

neighbour, who was kind enough to give it to Viv. The neighbour was shucking paua and accidentally nicked the gut of one animal – and out popped the little pearl from the yucky mess of paua guts!

A more pleasant way to find paua pearls is definitely to find them on a beach, 'on the shell' so to speak. Which is how I found mine – the hemispherical kind - on the Chatham Islands in 2003. I couldn't estimate how many times I have turned over a beached paua shell to see what the inside is like – 99+% of the time for a very uninteresting result. This time was different! But is it a natural paua pearl? Could it have been an escapee from the farm at Whangamoe Inlet which was established in 1989? If so it had travelled quite a distance – Whangamoe Inlet is near Port Hutt and I found my shell with paua pearl (over 10 mm diameter) at Kaingaroa. I will never know!



Ericusa fulgetrum (G.B. Sowerby I, 1825)

by Peter Pienaar

The common name of *Ericusa fulgetrum* is The Lightning Volute, so called because the markings on some specimens resemble jagged lightning bolts (*fulgetrum* is a Latin noun meaning "lightning"). The species is found only in southern Australian waters: from Esperance in Western Australia to the border of Victoria, and northwest Tasmania.

It is an extremely variable species but it has no subspecies. There are, however, a number of forms that were described by Verco, 1909–1912, and one form was named as a separate species: *Ericusa orca* Cotton, 1952 – since synonymised. This article is an attempt to show all the forms described by Verco, together with images of specimens from my own collection.

Some specimens can be found on sand banks at low tide (form *dictua* and the normal patterned *E. fulgetrum*). Most examples are dived in depths up to 25 m, adjacent to sea grass beds, where they feed mainly on *Phasianella australis* (Gmelin, 1791), or they may be trawled or dredged mainly on sand in deeper water up to 225 m.

Some of the regular patterns of *Ericusa fulgetrum* are shown here.

References:

- WEAVER, C.S & DU PONT, J.E. 1970. The Living Volutes. Delaware Museum of Natural History.
 POPPE, G. T & GOTO, Y. 1992. Volutes. L'Informatore Piceno.
 ABBOTTSMITH, F. 1969. Multiform Australian Volutes. Manly, N.S.W.
 PATTISON, G. Notes written in October 1954.
 JELLET, B. A pamphlet on the Lightning Volute. South Australia. Date and publisher unknown.
 VERCO, J.C. 1909-12. Notes on South Australian marine Mollusca with descriptions of new species. Transactions of the Royal Society of South Australia.



Port Augusta SA 133.0 mm



Point Bollingbroke SA 115.1 mm



Kangaroo Island SA 128.5 mm



Edithburgh SA 169.8 mm



Port Lincoln SA 120.6 mm

All of the forms of *E. fulgetrum* may have orange sun rays or a flame pattern on the columella. These uncommon, spectacular specimens are known as the "sunrays" form in addition to their other form name. The "sun rays" specimen below is *E. fulgetrum* forma *puntisligata*.



Ceduna SA 101.6 mm
Photo: Kris Woods

Dictua form:

This form has a pattern of very fine irregular lace-like axial lines (unlike the bold zig-zag axials of the regular form), often with a few random dark flecks or dashes. It can sometimes be found on sand banks at low tide. The name *dictua* is derived from the Greek word *dictyum* meaning a net.



Edithburgh SA 147.7 mm

Alba form:

A white or cream shell with a white or cream coloured aperture with no discernible pattern.



Esperance WA 122.9 mm

Connectens form:

2 spiral dark brown bands on body whorl with brown axial zig-zag stripes, which, as the name suggests, connect the bands.



Port Lincoln SA 128.1 mm

Forms of *Ericusa fulgetrum* described by Verco:

Unicineta form:

1 spiral band on the body whorl.



Point Bollingbroke SA 126.9 mm

Bicineta form:

2 spiral bands on the body whorl.



Taylors Island SA 123.9 mm

Tricineta form:

3 spiral bands on the body whorl.



Taylors Island SA 134.2 mm

Lunisligata form:

2 spirals of dark crescent shaped flecks on the body whorl with a cream background - sometimes with dictua-like axial lines but no dark axial lines.



Ceduna SA 108.9 mm

Punctisligata form:

A cream shell with occasional small dark dots on all the whorls.



Ceduna SA 102.4 mm

Orca form:

A cream or slightly pink shell resembling *alba* but narrower, lightweight and slightly flattened with no pattern. Usually trawled in deep water, this rather rare form was described by Cotton in 1952 as the species *Ericusa orca* but it is no longer accepted as a valid species.



Great Australian Bight 102.0 mm

A Nostalgic Trip: Wellington 5-16 June 2016

by Eric Scott

It has been over 30 years since we left Wellington and moved north to Whangarei and over that time, apart from specific trips for work and events, we have not spent any real time there until this year. Heather and I came down in June for seven days for the sole purpose of catching up with friends and family and to revisit old shelling haunts. On the way down we overnighted in Rotorua and spent time searching for *Schizoglossa worthyae* Powell, 1949 on Mt Ngongotaha but, alas, found nothing.

The next day we drove straight to Waikanae where we booked in to our accommodation at Willowsend, Otaihanga, on the south side of the Waikanae River mouth. It was a very nice pet friendly homestay, which was perfect for us and our dog Tess, as it was near to Waikanae Beach with wide open spaces for her to run around in. We did manage to have a

brief look along the beach while we were there but didn't find anything of note.

Our first real shelling day was on the Tuesday at Pukerua Bay. We spent a good part of the day looking and walking along the bay in a southward direction gathering some shell sand in amongst the rock pools.

Unfortunately I have still to dry it out so haven't had a good look through it yet. There wasn't much in the way of wash-ups but it was beautiful location and a great place for a leisurely stroll.

Our next shell related event was a visit to Te Papa on the Thursday where I caught up with Bruce Marshall and Kerry Walton while Heather caught up with her sister. I had a great afternoon looking through parts of the Te Papa collection and discussing recent finds with Bruce and Kerry. I can't thank them enough for their hospitality. It is a godsend

that we shell collectors have people like Bruce and Kerry to assist us in naming those tricky finds and to instill enthusiasm into what we do. It was very uplifting. Heather picked us all up and after dropping Bruce off at his home, we headed up to Kerry's place for dinner. What a great host he is! We talked about and looked at shells until late and organized a shelling trip for the weekend.

On the Saturday we picked Kerry up early and headed off to Lake Wairarapa to look for fresh water mussels and other fresh water shells. I was amazed at how easy it was to collect washed up *Echyridella menziesii* (Gray, 1843) and *Echyridella aucklandica* (Gray, 1843). We also collected washed up *Latia neritoides* Gray, 1850 (note the brownish colour of these), *Potamopyrgus antipodarum* (Gray, 1843) and *Sphaeriidae* sp. It was then onto the Putangirua Pinnacles Scenic Reserve on Whatarangi Road, Palliser Bay. When we got there we noticed that there had been some major road works further on and discovered several fossil seams exposed by the works. These fossils are from the Late Miocene period (5–10 million years ago). Included among those collected were a couple of different species of *Struthiolaria*, which I think are *S. praenuntia* Marwick, 1926 and *S. callosa* Marwick, 1924. The most common species we saw there was *Dosinia cottoni* Marwick, 1927. Our next stop was at Upper Hutt where we collected some *Latia neritoides* from



smooth boulders in the Akatarawa River West. These ones are of a significantly blacker colour [Ed. note: a metallic precipitate]. While there we also searched for *Wainuia urnula* (Pfeiffer, 1855) in the nearby bush area and noted a couple of live ones and several eggs. It was a long and satisfying day.

On the Sunday we visited Jenny Raven and had a look through her collection - another amazing collection! Pat Lakeman and Graham Aamodt were also there and a pleasant time was had over lunch reminiscing on the shell trips we had been on back in the early 1980s.

On Monday we headed off to Otorohanga. One of the reasons for spending time in the Waitomo District was so we could visit Kiritihere Beach and have a look at the fossil deposits there. It is a very remote west coast beach. As we followed the stream from the carpark down to the beach we noticed an eel like "thing" washed up onto the beach. It was too slender to be an eel so our first thoughts were that it was a sea snake. On closer inspection though it had a sucker type mouth so I concluded that it was a lamprey. The fossil deposits are at the southern end of the beach. These ones are over 190 million years old and include *Monotis richmondiana* Zittel 1864 and *M. calvata* Marwick 1953, scallop-like shells. We picked up a few broken pieces of rock and accidentally dropped one to find that it broke along a thin white line exposing fossilized shells inside. While there we gathered some shell sand and some *Haustrum scobina* (Quoy & Gaimard, 1833) and *Paratrophon*



Photos above, clockwise from top left:

Echyridella aucklandica; *Echyridella menziesii*; *Latia neritoides*; *Potamopyrgus antipodarum*; *Sphaeriidae* sp.

cheesemani exsculptus Powell, 1933. In among the shell sand we found what appear to be two species of *Caecum*.

The next day was spent visiting the Raglan area. On the way I stopped off at a little river that feeds into the Raglan Harbour to look for more *Echyridella* specimens. The river was up quite high due to heavy overnight rain but not to be put off I had a search along the bank anyway and ended up slipping in and getting totally immersed. Fortunately I was able to haul myself out and in the process found a couple of *E. aucklandica* and *E. menziesii*. I was

happy with that! We also stopped at the Bridal Veil Falls, Mt Pirongia and Mt Karioi where I gathered leaf litter from each area. Some snails were found in each lot but I have yet to identify them. This wrapped up our holiday as we headed back home on the Thursday. All in all we had a great time and plenty of pleasant memories.

Wellington Shell Club 2015-2016

President: Jenny Raven • PO Box 12163, Thorndon, Wellington 6144 • Email: ravenjay@xtra.co.nz
Vice President: Kris Woods • Email: kris.woods@paradise.net.nz
Secretary: Fred Keil • PO Box 12163, Thorndon, Wellington 6144 • Email: freddi@xtra.co.nz
Treasurer: Roger Woods • PO Box 12163, Thorndon, Wellington 6144 • Email: rwoods@paradise.net.nz
Editors: Pat Lakeman and Kerry Walton • Email: pat.lakeman@xtra.co.nz
Newsletter & Librarian: Jill Burnett • 84 Brougham Street, Mt Victoria, Wellington 6011 • Telephone 384 7418
Sales table and raffles: Kris Woods
Website: Roger Woods • <http://www.wellingtonshellclub.org.nz>

Wellington Shell Club Publications

Cookia is the journal of the Wellington Shell Club and is published annually, containing articles and smaller items of interest on shells, shell collecting, and molluscs as well as other related marine topics.

Cookia was first published in 1976; prior to this the Club published a *Circular*, then a *Bulletin*, as well as occasional *Study Notes* on various families of mollusca.

PUBLICATIONS TO DATE

1956-1965 *Circular* 1 to 21
1967-1975 *Bulletin* 1 to 36
1976-1977 *Cookia* Volume 1, Nos 1, 2, 3
1977-1978 *Cookia* Volume 2, Nos 1, 2, 3
1979-1980 *Cookia* Volume 3, Nos 1, 2, 3
1980-1981 *Cookia* Volume 4, Nos 1, 2, 3
1982-1984 *Cookia* Volume 5, Nos 1, 2, 3, 4
1985-1992 *Cookia* Volume 6, Nos 1, 2, 3, 4
1993-1996 *Cookia* Volume 7, Nos 1, 2, 3, 4 [Index to 1996]
1997-2015 *Cookia* Volumes 8 - 27.

Cookia Volume 14, June 2003 is The Shell Lists issue.

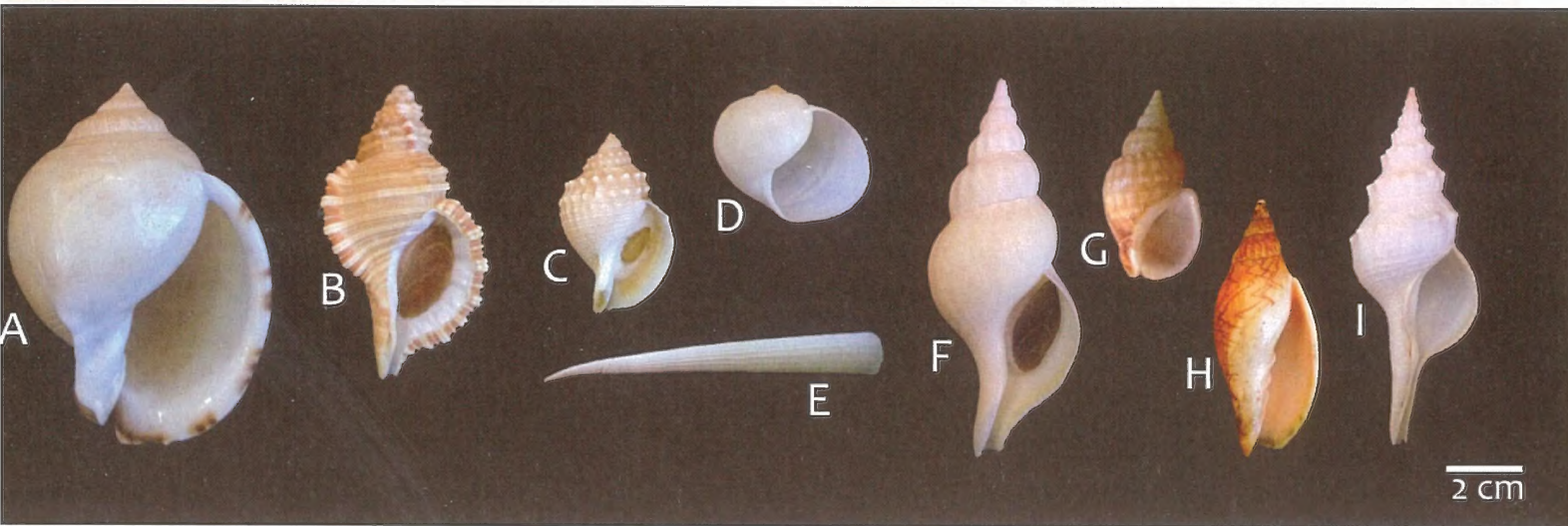
Supplement to Cookia Volume 26, December 2014 is an index of all articles in the Club publications 1956-2014.

BACK ISSUES

Back issues of *Cookia* are available, as are individual articles, and copies of the Bulletins, Circulars and Study Notes.

Order from Jill Burnett, 84 Brougham Street, Mt Victoria, Wellington 6011 New Zealand; or see our homepage at www.wellingtonshellclub.org.nz

Identification challenge solution:



- A) *Semicassis pyrum* B) *Cabestana tabulata* C) *Galeodea triganceae*
D) *Globisium drewi* E) *Fissidentalium zelandicum* F) *Penion benthicolus*
G) *Cominella olsoni* H) *Alcithoe fusus* I) *Fusinus genticus*

